UNITED STATES DEPARTMENT OF COMMERCUNITED STATES DEPARTMENT OF COMMERCUNITED STATES P.O. Box 1450
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

43569

7590

02/24/2005

MAYER, BROWN, ROWE & MAW LLP 1909 K STREET, N.W. WASHINGTON, DC 20006 EXAMINER

DANG, TRUNG Q

ART UNIT

PAPER NUMBER

2823

DATE MAILED: 02/24/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,144	12/10/2003	Sang Wook Ryu	P69368US0	4774

TITLE OF INVENTION: METHOD OF FORMING TRENCH IN SEMICONDUCTOR DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	05/24/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or Fax

appropriate. All further cor	respondence including the below or directed otherwise	Patent, advance or	ders and notific	cation of maintenance fees v	ired). Blocks 1 through 5 s vill be mailed to the current ; and/or (b) indicating a sepa	correspondence address as	
	E ADDRESS (Note: Use Block 1 for	any change of address)	,	Fee(s) Transmittal. Th	mailing can only be used for its certificate cannot be used all paper, such as an assignment	for any other accompanying	
	590 02/24/2005			have its own certificat	al paper, such as an assignme e of mailing or transmission.	,	
•	'N, ROWE & MAW	LLP		Ce	rtificate of Mailing or Trans	smission	
1909 K STREET, 1				I hereby certify that the	nis Fee(s) Transmittal is bein	g deposited with the United	
WASHINGTON, I	OC 20006			addressed to the Mai	nis Fee(s) Transmittal is bein with sufficient postage for fir I Stop ISSUE FEE address TO (703) 746-4000, on the o	above, or being facsimile late indicated below.	
						(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE	····	FIRST NAMED I	INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/731,144	12/10/2003		Sang Woo	k Ryu	P69368US0	4774	
TITLE OF INVENTION: M							
APPLN. TYPE	SMALL ENTITY	ISSUE F	EE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1400	)	\$300	\$1700	05/24/2005	
EXAM	INER	ART UN	IT	CLASS-SUBCLASS	J		
DANG, T	RUNG Q	2823		438-527000			
"Fee Address" indicat	lence address (or Change of 22) attached. ion (or "Fee Address" Indica or more recent) attached. Use	Correspondence	(1) the name or agents OF (2) the name registered at 2 registered listed, no name	ng on the patent front page, lies of up to 3 registered patent, alternatively, e of a single firm (having as a torney or agent) and the nampatent attorneys or agents. If me will be printed.	nt attorneys 1a member a 2		
PLEASE NOTE: Unless	an assignee is identified be	elow no assignee	data will annea	r on the natent. If an assign	nee is identified below, the d	ocument has been filed for	
recordation as set forth in	37 CFR 3.11. Completion	of this form is NO	l' a substitute fo	r filing an assignment.			
(A) NAME OF ASSIGN	RE	(В	) RESIDENCE	: (CITY and STATE OR CO	UNTRY)		
Please check the appropriate					orporation or other private gr	oup entity Government	
4a. The following fee(s) are	enclosed:	4b	. Payment of Fe	• •		·	
Issue Fee	11 22 12	D	A check in the amount of the fee(s) is enclosed.  Payment by credit card. Form PTO-2038 is attached.				
	mall entity discount permitte						
Advance Order - # or	Copies		Deposit Accou	or is hereby authorized by c int Number	harge the required fee(s), or enclose an extra c	credit any overpayment, to opy of this form).	
5. Change in Entity Status			_				
	MALL ENTITY status. See				LL ENTITY status. See 37 C		
The Director of the USPTO NOTE: The Issue Fee and Printerest as shown by the reco	is requested to apply the Issublication Fee (if required) words of the United States Pate	ie Fee and Publicate vill not be accepted ent and Trademark	tion Fee (if any) I from anyone o Office.	or to re-apply any previousl ther than the applicant; a reg	y paid issue fee to the applica istered attorney or agent; or the	ation identified above. the assignee or other party in	
Authorized Signature				Date			
Typed or printed name				Registration	No		
This collection of informatio an application. Confidentiali submitting the completed ap	n is required by 37 CFR 1.3 ty is governed by 35 U.S.C. plication form to the USPT	11. The informatio 122 and 37 CFR O. Time will vary	n is required to 1.14. This collect depending upon	obtain or retain a benefit by to ction is estimated to take 12 in the individual case. Any co	the public which is to file (an minutes to complete, includir omments on the amount of ti	d by the USPTO to process) ag gathering, preparing, and me you require to complete	

this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



#### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/731,144 12/10/2003		Sang Wook Ryu	P69368US0	4774	
43569 7590 02/24/2005			EXAMINER		
MAYER, BROWN, ROWE & MAW LLP 1909 K STREET, N.W.			DANG, TI	DANG, TRUNG Q	
WASHINGTON,	•		ART UNIT	PAPER NUMBER	
			2823		
			DATE MAILED: 02/24/2005	5	

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.